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FEDERAL COMMUNICATIONS COMMISSION
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William F. Caton
Acting Secretary
Federal Communications Commission
Mail Stop 1170
1919 M Street, N.W., Room 222
Washington, D.C. 20554

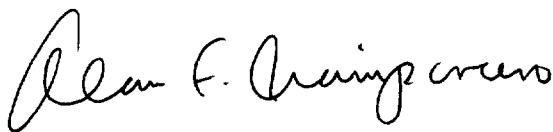
Dear Mr. Caton:

Re: *PP Docket No. 93-253 - Implementation of Section 309(j) of the Communications Act, Competitive Bidding*

On behalf of Pacific Bell and Nevada Bell, please find enclosed an original and six copies of their "*Opposition To Petitions For Reconsideration*" in the above proceeding.

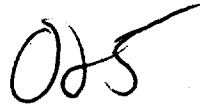
Please stamp and return the provided copy to confirm your receipt. Please contact me should you have any questions or require additional information concerning this matter.

Sincerely,



Enclosures

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Before the
FEDERAL COMMUNICATIONS COMMISSION
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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY

In the Matter of

Implementation of Section 309(j)
of the Communications Act
Competitive Bidding

PP Docket No.93-253

**OPPOSITION BY PACIFIC BELL AND NEVADA BELL
TO PETITIONS FOR RECONSIDERATION**

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SUMMARY

Southwestern Bell, GTE, and AIDE incorrectly assert that the three-stage Milgrom-Wilson activity rule is too complex or that it reduces bidding flexibility. In his attached affidavit, Professor Milgrom responds to these arguments and explains in detail why they are wrong, and why the alternatives that they propose are substantially inferior.

As Professor Milgrom explains, software is available to help ensure that the three-stage Milgrom-Wilson activity rule will not be hard to implement. Moreover, the activity rule is designed to be the best known means of serving two objectives that are of key importance in multi-round simultaneous auctions. The first is to ensure that the auction is brought to a timely conclusion while allowing adequate time at each round of bidding for bidders to consider their bids. The second is to improve the flow of information to bidders during the course of the auction. The three-stage Milgrom-Wilson activity rule avoids delay, provides meaningful information, and allows bidders the flexibility to react to that information. This strongly supports the Commission's public interest goal that licenses be awarded to bidders who place the highest value on them and will use them most efficiently.

A few petitioners present frivolous arguments in support of changes that either would postpone or cancel auctions. These proposals are contrary to Congressional intent and deadlines for auctions and contrary to the Commission's goal to create full wireless competition in order to benefit consumers. The Commission and the public cannot afford unnecessary delays in allowing new

service providers to enter wireless markets in order to compete with entrenched cellular and SMR providers who are rapidly expanding their own markets.

Accordingly, the Commission should reject these arguments and move forward with its auction program.

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FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

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JUL 1 1994

FEDERAL COMMUNICATIONS COMMISSION
3450 10th Street, N.W.
Washington, D.C. 20541

In the Matter of

Implementation of Section 309(j)
of the Communications Act
Competitive Bidding

PP Docket No. 93-253

**OPPOSITION BY PACIFIC BELL AND NEVADA BELL
TO PETITIONS FOR RECONSIDERATION**

I. **INTRODUCTION**

Pacific Bell and Nevada Bell submit the following opposition to certain petitions for reconsideration or clarification of the Second Report and Order ("Order") in the above-captioned proceeding. In the Order, the Commission established a sound framework for spectrum auctions. We are particularly pleased that for these auctions the Commission has chosen as its primary method of competitive bidding the simultaneous multiple-round bidding process and three-stage activity rule that were presented by two leading auction experts, Professors Paul R. Milgrom and Robert B. Wilson.

As Professor Milgrom explains in an affidavit attached to this opposition, Southwestern Bell, GTE, and the Association of Independent Designated

Entities (“AIDE”) are wrong to assert that the three-stage Milgrom-Wilson activity rule is too complex or that it reduces bidding flexibility. This activity rule can be implemented without difficulty and actually increases meaningful flexibility by providing bidders with substantial information upon which to base their bids throughout the auction. By getting more information out earlier to all bidders, the Milgrom-Wilson activity rule will help attain the Commission’s public interest goal that licenses generally be awarded to the bidders that place the highest value on them.¹ These are the bidders who will use the licenses most productively. In addition, as the parties do not dispute, the Milgrom-Wilson activity rule will ensure against harmful delays in the completion of auctions.

A few other petitioners argue that the Commission’s auction program is flawed because the Commission is moving too fast with the auction process or should not employ competitive bidding at all for PCS licenses. Phase One asserts that the Commission is scheduling auctions too quickly and has not yet established that auctions are needed based on mutual exclusivity of licenses. Millin asserts that the Commission has not properly established that PCS will be primarily a subscription service which is subject to competitive bidding. The National Association of Business and Educational Radio (“NABER”) asserts that the Commission has provided itself too much discretion to adjust the rules as needed during the auctions and should solidify its rules prior to the auctions. The Commission has properly addressed all these issues based on a substantial record

¹ See, e.g., Order, para. 5.

and is moving forward with auctions in a manner that meets the requirements and goals of Congress.

The parties who raise these objections seek changes that would delay the distribution of spectrum licenses. The Commission and the public cannot afford unnecessary delays in allowing new service providers to enter wireless markets in order to compete with entrenched cellular and SMR providers who are rapidly expanding their own markets. Undue delay will frustrate the creation of full competition in these markets and jeopardize the attainment of benefits for consumers.

II. THE THREE-STAGE MILGROM-WILSON ACTIVITY RULE CAN BE IMPLEMENTED WITHOUT DIFFICULTY AND WILL INCREASE MEANINGFUL BIDDING FLEXIBILITY

Southwestern Bell, GTE, and AIDE assert that the three-stage Milgrom-Wilson activity rule is too complex or that it reduces bidding flexibility. In his attached affidavit, Professor Milgrom responds to these arguments and explains in detail why they are wrong, and why the alternatives that they propose are substantially inferior.

As Professor Milgrom explains, software is available to help ensure that the Milgrom-Wilson three-stage activity rule will not be hard to implement. Moreover, the activity rule is designed to be the best known means of serving two objectives that are of key importance in multi-round simultaneous auctions. The first is to ensure that the auction is brought to a timely conclusion while allowing adequate time at each round of bidding for bidders to consider their bids. The

second is to improve the flow of information to bidders during the course of the auction.

These objectives are important because, in a multi-round simultaneous auction, bidders often will be tempted to delay their serious bidding until late in the auction, when they may hope to have better information about the range of prices at which the various licenses will eventually be sold. Without some activity rule, this temptation to delay bidding could seriously delay the conclusion of the auction, raising costs for all the parties, delaying the allocation of licenses, and possibly provoking Commission intervention that would damage the efficiency of the allocation. In addition, these bidding delays are self-defeating; without an activity rule, the information conveyed by current bid prices is ambiguous because bidders cannot be sure whether there are still many interested bidders for each license at the current bid prices who are lying in wait.

In order to help alleviate these problems, Professors Milgrom and Wilson originally proposed an activity rule that required a bidder to be "active" on every bidding day on penalty of being withdrawn from the auction.² In reply to comments, however, Professors Milgrom and Wilson pointed out that this activity rule allows a bidder who aspires "to aggregate a large group of licenses to begin by bidding on a much smaller number of licenses than it intends eventually to acquire,

² Affidavit of Paul R. Milgrom and Robert B. Wilson, November 8, 1993, attached to Comments of Pacific Bell and Nevada Bell, November 10, 1993, PP Docket No. 93-253. Being "active" means either having the highest bid from the previous round or submitting a new bid at the current round.

resulting in slow progress of the auction.”³ In order to prevent this delay and provide more information to bidders, they recommended their three-stage activity rule⁴ which the Commission chose as its preferred activity rule for multi-round simultaneous auctions.⁵

The three-stage Milgrom-Wilson activity rule is designed to avoid delay and provide more information, while allowing bidders sufficient flexibility to respond to the new information and pursue backup strategies during the course of the auction. Most of the auction will take place in “phase I” during which bidders are required to remain active on a modest fraction, just one-third, of the maximum amount of spectrum for which they wish to remain eligible. The rule does not require that a bidder be active on the same license from period to period. A bidder who bids on the A band in one round may switch to the B band or even to a different geographic area at another round with no loss of eligibility. The point of the rule is to encourage each bidder to be active on a reasonable portion of the licenses. Bidders that do so remain eligible to bid for any licenses up to their eligibility limits at the next round. This modest activity requirement combined with a reasonable minimum bid increment ensures that bid prices will rise steadily during phase I until the prices reach a high enough level for some bidders to lose interest, stop bidding, and reduce their eligibility for further bidding.

³ Replies to Comments on PCS Auction Design by Paul Milgrom and Robert Wilson, attached to Reply Comments of Pacific Bell and Nevada Bell, November 30, 1993, p. 22, PP Docket No. 93-253.

⁴ Id. at 22-25.

⁵ Order, para. 144.

After prices rise high enough to discourage many bidders, there will be fewer new bids at each round and, a switch to phase II will be triggered. In view of the activity rule, the low level of activity means that there can be no more than about three active bidders remaining on an average license. The remaining bidders then know that the prevailing prices are high enough to have led all but about three bidders per license to scale back their plans. Without an activity rule, a low level of activity at any given level of prices might mean the same thing or it might mean nothing more than that many bidders were still lying in wait; there is no way to tell. The activity rule makes it possible for the bidders to interpret the price information at the end of phase I clearly and correctly.

The last two phases in the Milgrom-Wilson activity rule are similarly designed to promote maximum information for bidders and to close the auction in an orderly way and without undue delay. During phase II, bidders must bid on $2/3$ of the volume of spectrum for which they wish to remain eligible. As the prices continue to rise, additional bidders will lose interest and become less active, reducing their eligibility for continued bidding.

When the pace of bidding slows again with few new bids at each round, the auction moves into phase III. At that time, there can be on average at most $1 \frac{1}{2}$ bidders still eligible per license. With so few bidders remaining, the auction can be brought expeditiously to a close if bidders bid actively on as much spectrum as still interests them. The Milgrom-Wilson rule effectively requires that level of activity by specifying that bidders are not permitted to increase their activity after the first round of phase III. During phase III, bidders must be active at every

round on as much spectrum as they wish to acquire. Once the auction reaches phase III, it will close quickly.

In this manner, the three-stage Milgrom-Wilson activity rule, implemented with available software, avoids delay, provides meaningful information, and allows bidders the flexibility to react to that information. This strongly supports the Commission's public interest goal that licenses be awarded to bidders that place the highest value on them. Therefore, the Commission should deny the petitions of Southwestern Bell, GTE, and AIDE which, as explained by Professor Milgrom in his attached affidavit, would replace this activity rule with alternatives that are substantially inferior.

III. THE COMMISSION SHOULD REJECT FRIVOLOUS PROPOSALS THAT WOULD CAUSE THE DELAY OR CANCELLATION OF AUCTIONS

A few petitioners present frivolous arguments in support of changes that either would postpone or cancel auctions. The Commission should reject these proposals which are contrary to Congressional intent and deadlines for auctions and contrary to the Commission's goal to create full wireless competition in order to benefit consumers.

Mutual Exclusivity

Phase One asserts that the Commission "is prohibited from establishing specific auction dates until it has determined that a particular application

is in fact mutually exclusive with another.”⁶ Phase One cites Section 309(j)(1) of the Communications Act for this proposition.⁷ That section, in pertinent part, states:

If mutually exclusive applications are accepted for filing for any initial license... then the Commission shall have the authority... to grant such license to a qualified applicant through the use of a system of competitive bidding that meets the requirements of this subsection.

The Commission’s Order is in full compliance with this provision. Prior to each auction, parties must file short-form applications. An auction will be cancelled “[i]f the Commission receives only one application that is acceptable for filing for a particular license, [because] mutual exclusivity would be lacking and the Commission would be prohibited from using competitive bidding to award the license.”⁸ Thus, in compliance with the statute, licenses will be awarded by competitive bidding only where mutual exclusivity exists.

There is no legal basis for Phase One’s argument that the Commission must delay establishing auction dates until mutual exclusivity is found. That approach would support Phase One’s private desire that the PCS and IVDS auction schedules be delayed so that it will have more time to plan its auction

⁶ Phase One makes this assertion on page 2 of its June 8, 1994 petition for reconsideration of the Third Report and Order and Fourth Report and Order in this proceeding. The Commission’s disposition of this issue, however, could affect all auction orders in this proceeding, and it is the Second Report and Order which established the Commission’s method of ensuring mutual exclusivity. Therefore, we briefly rebut Phase One’s assertion here.

⁷ Id.

⁸ Order, para. 165.

strategy.⁹ That approach, however, would not support meeting Congressional auction deadlines or the public interest in allowing full competition without undue delay.

Compensation From Subscribers

Millin asserts that the Commission erred in classifying PCS as a subscription service.¹⁰ Section 309(j)(2) of the Communications Act provides, in pertinent part, that competitive bidding may be applied to spectrum “if the Commission determines that... the principal use of such spectrum will involve, or is reasonably likely to involve, the licensee receiving compensation from subscribers....”

The Commission thoroughly reviewed this issue and found that the comments and its own experience with experimental PCS applications established that the principal use of PCS spectrum is likely to be for the provision of service to subscribers for compensation.¹¹ The Commission pointed out that Millin was the only commenter who seriously disputed this conclusion, and the Commission explained why it disagreed with Millin.¹²

Millin does not offer any evidence or arguments that could change the Commission’s decision. In fact, most of what Millin presents indicates that PCS will

⁹ Phase One, pp. 3-4.

¹⁰ Millin, p. 1.

¹¹ Order, para. 56.

¹² Id. at paras. 55-56.

compete with cellular subscription-based services.¹³ This competition will be best encouraged by placing PCS licenses in the hands of those who value them most via competitive bidding.

Millin is urging the Commission to ignore the record and its own experience and classify PCS as a broadcast service based solely on Millin's speculations about broadcast PCS. This the Commission of course cannot legally do, and the Commission has correctly found that such a course would be contrary to its goals for "rapid deployment of PCS service to the public" and "efficient and intensive use" of PCS spectrum.¹⁴

The Administrative Procedures Act

NABER asserts that the Order is in violation of the A.P.A. because 1) it sets forth generic principles for auctions to be followed by more specific orders for each auction without a new rulemaking proceeding and 2) the Commission may make adjustments to auction procedures during the course of an auction without a new rulemaking proceeding. There is no merit to NABER's objections on either of these points.

First, while the A.P.A. generally requires that rules be promulgated after notice and a period for comments, the A.P.A. does not prohibit the Commission from issuing more than one order based on that notice and comment period.¹⁵ If the

¹³ See Millin, pp. 6-7.

¹⁴ Order, at paras. 57-58.

¹⁵ 5 U.S.C. § 553.

Commission had to include all its rules for every different type of spectrum auction in its initial order, auctions would be substantially delayed for no purpose.

Second, there is an exception to the A.P.A.'s notice and comment requirements "when the agency for good cause finds (and incorporates the finding and a brief statement of reasons therefore in the rules issued) that notice and public procedure thereon are impracticable, unnecessary, or contrary to the public interest."¹⁶ This exception is narrowly construed by Courts, but its use may become appropriate if the Commission finds during an auction that adjustments to the auction process are needed. Delaying the auction in order to conduct a new rulemaking proceeding prior to making necessary procedural adjustments that are consistent with the Commission's generic rules would be impracticable and contrary to the public interest.

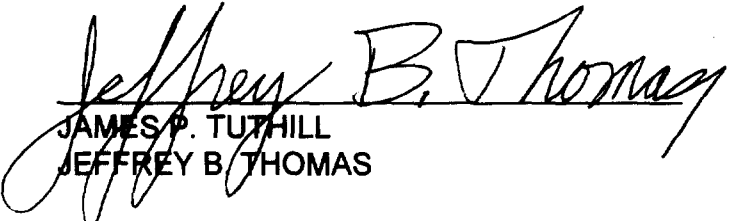
¹⁶ 5. U.S.C. § 553(c).

IV. CONCLUSION

For all the above reasons, the Commission should deny the petitions for reconsideration or clarification filed by Southwestern Bell, GTE, AIDE, Phase One, Millin, and NABER.

Respectfully submitted,

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NEVADA BELL



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Date: July 11, 1994

Attachment

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)	
)	
Implementation of Section 309(j))	
of the Communications Act)	
Competitive Bidding)	PP Docket No. 93-253
)	
_____)	

Affidavit of Paul R. Milgrom

1. My name is Paul R. Milgrom. I am the Shirley and Leonard Ely, Jr. Professor of Humanities and Sciences and Professor of Economics at Stanford University in Stanford, California, 94305. My background and experience are set forth in my November 8, 1993 affidavit which was attached to the comments of Pacific Bell and Nevada Bell filed November 10, 1993 in the above-captioned proceeding. I have been asked by Pacific Bell and Nevada Bell to respond to certain of the Petitions for Reconsideration of the Second Report and Order in that proceeding.

2. Three of the Petitions for Reconsideration of the Second Report and Order object to the use of the three-stage Milgrom-Wilson activity rule in simultaneous auctions. The objecting petitions were filed by the Association of Independent Designated Entities (AIDE), GTE companies, and Southwestern Bell Corporation. AIDE objects to the complexity of the activity rule, inquires "fundamentally, why should the FCC care whether bidders participate in the entire auction or only at the end when they might be the highest bidder?," argues that the FCC should instead use its discretion "to control the

pace of auctions on an ad hoc basis,” and proposes that “the Commission should withdraw its activity rules, at least as applied to Designated Entities.” GTE argues that the Milgrom-Wilson activity rule “unduly restricts the flexibility of applicants to alter their bidding strategies to take into account information that develops during the course of the auction” and proposes that bidders be required only to “remain active on one property in order to remain eligible to later bid on any property or combination of properties for which the bidder has made sufficient upfront deposits.” Southwestern Bell objects to the complexity of the activity rule, asserts that there is no tested software to implement it, and proposes an alternative rule, according to which bidders are required to be active on only a single license and when bidding activity becomes too slow, the Commission should issue “notice that bidding will close after ‘X’ more rounds.”

3. Each of the three petitioners makes a different proposal about how the FCC should replace that Milgrom-Wilson activity rule, and each proposal is flawed. GTE proposes that bidders be required to be active on only a single license in each round. However, without more substantial pressure on the bidders to bid actively early in the auction, each bidder will have a strong incentive to adopt a wait-and-see attitude, hoping that others will tip their hands before it must commit itself. If many bidders adopt such a strategy, the auction would be considerably prolonged. Moreover, contrary to GTE’s claims, its relaxed activity rule would provide no benefit in terms of extra flexibility for bidders to respond to emerging price information. The reason is that, with GTE’s proposed activity rule, bidders cannot know how many other bidders are still potentially interested in the various licenses at the current prices. That knowledge gap would

severely hamper each still-active bidder's ability to use the current prices in deciding what plans to pursue. In contrast, the Milgrom-Wilson activity rule eliminates a bidder's option to lay in waiting. With the Milgrom-Wilson rule, a slowing of the pace of new bids is highly informative to the still-active bidders: it means that the prevailing bid prices have led most other bidders to drop out. A more detailed analysis of the information content of bid prices with the Milgrom-Wilson activity rule is contained in my letter to Evan Kwerel of June 19, 1994.

4. AIDE proposes that the Commission control the pace of the auction by exercising its "discretion," but this begs the question of how to do so. How should the Commission determine when to intervene in the auction? What form should the intervention take? How can it encourage bidders not to lie in wait and ensure that when bidding has slowed, the prices convey valuable information to the bidders? Without answers to these questions, AIDE's first proposal — to eliminate the activity rule for all bidders — is not a workable alternative.

5. AIDE's second proposal is to eliminate the activity rule only for the designated entities. However, where the FCC adopts set asides or substantial preferences for designated entities that are limited to particular licenses, the suspension of the activity rule for just those licenses would re-create the GTE rule for the designated entities, which would be harmful to the designated entities as a group. Such a rule would increase the likelihood that the most efficient designated entities — those with the best chance for ultimate success in the wireless industry — would be denied a license in favor of weaker

designated entities. This would thwart the Commission's goal of ensuring not only that licenses reach designated entities, but that those entities also become effective competitors in the eventual PCS and other wireless market. Where set asides or significant preferences are used for designated entities on a limited selection of licenses, the AIDE proposal has no advantages even for the designated entities.

6. Southwestern Bell's proposed alternative to the Milgrom-Wilson activity rule specifies that, when there has been little active bidding, the FCC would announce that only X rounds of bidding remain. Even supposing that the details (what is X? when should the Commission intervene?) could be worked out, this proposal would be highly susceptible to damaging strategic manipulations by the bidders. Once the FCC announces that X rounds remain, bidders would have an incentive to ambush other bidders by waiting until the final round and then submitting a "jump" bid, to which competitors would have no chance to respond. Sophisticated bidders would not bid actively before the final round, since that would only give more information to their competitors. With the serious bidding by sophisticated bidders occurring all at the final round, the consequence of the Southwestern Bell proposal would be something resembling a *one-round* simultaneous sealed-bid auction. Such a design has notoriously poor efficiency properties, because it provides no useful information to bidders before they must make their final bids. The Southwestern Bell proposal is thus critically flawed.

7. The last issue, which has been raised by AIDE and Southwestern Bell, concerns the purported complexity of the Milgrom-Wilson activity rule. The complexity argument

is discussed in greatest detail by Southwestern Bell, which claims that the FCC cannot reliably implement the Milgrom-Wilson activity rule. However, in previous filings, Pacific Bell has conclusively demonstrated the practical workability of the rule by supplying Excel spreadsheet software that implements the full Milgrom-Wilson design, including the activity rule. This software is publicly available for testing. Moreover, there has been no disagreement among expert commentators about the implementability of the rule. At the CalTech meeting sponsored by NTIA in January, 1994, with several FCC staff in attendance, the technical experts who commented on implementation, including GTE's expert, affirmed that the Milgrom-Wilson design could be implemented without difficulty. It is noteworthy that GTE, which opposes the Milgrom-Wilson activity rule and has studied its feasibility, does not dispute the implementability of the rule. The contrary claims made by Southwestern Bell are offered without evidence of any kind and in apparent ignorance of the publicly available software that implements the Milgrom-Wilson activity rule. The claim that the Milgrom-Wilson rule is too complex to administer reliably is unsupported and quite wrong.

8. The evidence that the Milgrom-Wilson activity rule can be implemented successfully is conclusive. Nevertheless, to ensure that this rule and the various other rules of the auction actually are implemented successfully, it would be prudent of the Commission to make available to all interested parties in advance of the auction the software that will be used to evaluate the bids, together with full documentation. Then, the parties themselves can verify that the software works correctly and point out any

problems before the auction is conducted.

Respectfully submitted,

Paul R. Milgrom
Paul R. Milgrom

Date:

Subscribed and sworn to before me this 5 day of July, 1994.

Hans Binz

Notary Public

My Commission expires NOT APPLICABLE



CERTIFICATE OF SERVICE

I, Cathy Jo Farey, hereby certify that a copy of the foregoing "OPPOSITION OF PACIFIC BELL AND NEVADA BELL TO PETITIONS FOR RECONSIDERATION" in PP Dkt. 93-253 was mailed, postage prepaid, this 11th day of July, 1994, to the parties listed below.



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